

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Previously Presented) A carbon monoxide oxidizer comprising:
a mixing unit that mixes at least two kinds of gases as a mixed gas, the mixing unit comprising a stacked body of a plurality of plates, the stacked body comprising a rotating passage formed by a through hole formed in each of the plates, to rotate a flow of the mixed gas.
2. (Previously Presented) The carbon monoxide oxidizer as defined in Claim 1, wherein the through-hole in each of the plates is formed so that a size of a through-hole is different from the size of an adjacent through hole.
3. (Previously Presented) The carbon monoxide oxidizer as defined in Claim 2, wherein the size of a through-hole increases as the mixed gas flows downstream.
4. (Previously Presented) The carbon monoxide oxidizer as defined in Claim 1, wherein the plates increase in thickness as the mixed gas flows downstream.
5. (Previously Presented) The carbon monoxide oxidizer as defined in Claim 1, wherein the through-hole in each of the plates is formed so that a forming position of a through-hole is different from the forming position of an adjacent through-hole.
6. (Previously Presented) The carbon monoxide oxidizer as defined in Claim 1, wherein the stacked body have a plurality of rotating passages.
7. (Previously Presented) The carbon monoxide oxidizer as defined in Claim 6, wherein the plurality of the rotating passages are configured to have different cross-sectional areas.
8. (Previously Presented) The carbon monoxide oxidizer as defined in Claim 6, wherein the plurality of the rotating passages are configured to rotate the mixed gas in different directions from each other.

9. (Currently Amended) The carbon monoxide oxidizer as defined in [[any]] Claim 1, wherein the mixing unit further comprises a porous body through which the mixed gas flows, which is located downstream of the stacked body.

10. (Previously Presented) The carbon monoxide oxidizer as defined in Claim 1, wherein the mixing unit comprises a plurality of stacked bodies arranged in series in a flow direction of the mixed gas.

11. (Previously Presented) The carbon monoxide oxidizer as defined in Claim 10, wherein one of the plurality of the stacked bodies comprises a rotating passage rotating in a different rotating direction from a rotating direction of a rotating passage in an adjacent stacked body.

12. (Previously Presented) The carbon monoxide oxidizer as defined in Claim 10, wherein the plurality of the stacked bodies respectively comprise a rotating passage having a different size.

13. (Previously Presented) The carbon monoxide oxidizer as defined in Claim 1, wherein the carbon monoxide oxidizer further comprises a porous body carrying a carbon monoxide preferential oxidation catalyst, which is located downstream of the mixing unit.

14. (Cancelled)

15. (Currently Amended) The carbon monoxide oxidizer as defined in Claim [[14]] 1, wherein the mixing unit further comprises an oxidant gas introducing passage formed inside the stacked body, which supplies the oxidant gas to the rotating passage, and wherein the two kinds of gases are a reformat gas that contains hydrogen produced by reforming a hydrocarbon fuel, and an oxidant gas.

16. (Previously Presented) The carbon monoxide oxidizer as defined in Claim 15, wherein the oxidant gas introducing passage is formed in one of the plates forming the stacked body.

17. (Currently Amended) A carbon monoxide oxidizer, comprising ~~The carbon monoxide oxidizer as defined in Claim 14;~~

a mixing unit that mixes at least two kinds of gases as a mixed gas, the mixing unit comprising a stacked body of a plurality of plates, the stacked body comprising a rotating passage formed by a through hole formed in each of the plates, to rotate a flow of the mixed gas

wherein the at least two kinds of gases comprise a reformat gas that comprises hydrogen produced by reforming a hydrocarbon fuel, and an oxidant gas, and

wherein the carbon monoxide oxidizer further comprises an oxidant gas supply unit comprising an orifice that reduces a cross-sectional area of a flow of the reformat gas and a blowout hole spurting out the oxidant gas toward the reformat gas passing through the orifice, and the mixing unit ~~[[5]]~~ further comprises a chamber between the oxidant supply unit and the stacked body ~~[[9]]~~, the chamber having a larger cross-sectional area than the cross-sectional area of the orifice.

18. (Previously Presented) The carbon monoxide oxidizer as defined in Claim 17, wherein the blowout hole is formed at a position offset from a center line of the orifice so as to cause the oxidant gas to form a rotating flow in the orifice.

19. (Previously Presented) The carbon monoxide oxidizer as defined in Claim 18, wherein a rotating direction of the oxidant gas produced by the blowout holes is set to be inverse to the rotating direction of the mixed gas in the stacked body.

20. (Previously Presented) The carbon monoxide oxidizer as defined in Claim 17, wherein the mixing unit further comprises a guide arranged inside the chamber that refracts a flow of the mixed gas flowing from the orifice toward the stacked body.

21. (Previously Presented) The carbon monoxide oxidizer as defined in Claim 17, wherein each of the through-holes is formed so that a width of the through-hole expands in a radial direction from a center of each of the plates.

22. (Previously Presented) The carbon monoxide oxidizer as defined in Claim 17, wherein the oxidant gas supply unit comprises a plurality of blowout holes selectively used based on a flow amount of the reformat gas.

23. (Previously Presented) The carbon monoxide oxidizer as defined in Claim 17, wherein each of the plates comprises a passage that circulates a cooling medium.

24. (Previously Presented) The carbon monoxide oxidizer as defined in Claim 17, wherein the mixing unit further comprises a porous body arranged in the rotating passage carrying a carbon monoxide preferential oxidation catalyst.

25. (New) A carbon monoxide oxidizer which removes carbon monoxide from a reformat gas that contains hydrogen produced by reforming a hydrocarbon fuel, comprising:

an orifice that reduces a cross-sectional area of a flow of the reformat gas;

a blowout hole spurting out an oxidant gas toward the reformat gas passing through the orifice to generate a mixed gas; and

a mixing unit that mixes the reformat gas and the oxidant gas as a mixed gas, the mixing unit comprising:

a chamber disposed downstream of the orifice and having a larger cross-sectional area than the cross-sectional area of the orifice; and

a stacked body of a plurality of plates, the stacked body comprising a helical passage connected to the chamber, and formed by a through hole formed in each of the plates, to rotate a flow of the mixed gas; and

a preferential oxidation catalyst unit which promotes a catalytic reaction of the mixed gas supplied through the helical passage to separate carbon monoxide therefrom.